

BEST AVAILABLE COPY

Remarks

35 U.S.C. § 112, sec nd paragraph

In the Office Action, the Examiner has rejected claims 3, 23, and 33 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the which the applicant regards as the invention. Applicants have herein amended claim 3 and 23 to correct the typographical errors without narrowing the scope of the claim. Reconsideration of the rejection under 35 U.S.C. § 112 is respectfully requested.

In response to the inquiry concerning claim 33, applicants provide the following definition of an inorganic liquid. An inorganic liquid is any substance that is not a compound of carbon, except carbon dioxide and carbon disulfide, in its liquid form, such as, but not limited to, water and supercritical carbon dioxide. Reconsideration of the rejection under 35 U.S.C. § 112, second paragraph, is respectfully requested.

35 U.S.C. § 102(e)

In the Office Action, the Examiner rejected claims 1-6, 9-13, 17, 24, and 39-41 under 35 U.S.C. § 102(e) as being anticipated by U. S. Patent No. 6,541,580 issued to Matyjaszewski (hereinafter "Matyjaszewski"). The Examiner specifically cites the Abstract; col. 1, lines 20-24; col.4 lines 31-51 (hereinafter "Matyjaszewski cite I"). The Examiner continues that Matyjaszewski further teaches a process for ATRP polymerization using a silica-supported catalyst, in Example 269 (hereinafter "Matyjaszewski cite II").

Applicant respectfully traverse this rejection. Matyjaszewski describes ATRP processes that include either an unattached ligand or, as is the case with Example 269, a ligand attached to a solid support, however, not both in a single reaction.

For instance, claim 1 and, therefore, rejected dependent claims 2-6, 9, and 10 include a limitation that the catalyst system comprises, at least in part, a ligand attached to a solid support and a soluble ligand. Table 1 summarizes the differences with the catalyst systems of claim 1 and the cited sections, Matyjaszewski cite I, and Matyjaszewski cite II.

	Soluble Ligand	Attached Ligand	Both soluble ligand and attached ligand
Matyjaszewski cite I	X		
Matyjaszewski cite II		X	
Claim 1	X	X	X

Table 1.

In addition, claim 11 and, therefore, rejected dependent claims 12-13 and 17 include a limitation that the system comprises, at least in part, an attached transition metal complex and a soluble transition metal complex. Table 2 summarizes the differences with the catalyst systems of claim 11 and the cited sections, Matyjaszewski cite I, and Matyjaszewski cite II.

	Soluble transition metal complex	Attached transition metal complex	Both soluble and attached transition metal complex
Matyjaszewski cite I	X		
Matyjaszewski cite II		X	
Claim 1	X	X	X

Table 2.

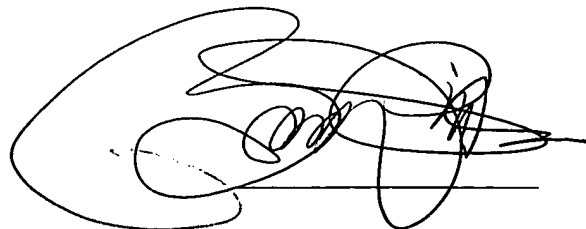
Further, claim 24 includes a limitation that the process includes a step of changing at least one (co)polymerization condition to cause at least a

portion of the transition metal complex to be unbound from the surface of the solid support. Matyjaszewski cite II does not disclose changing a least one (co)polymerization condition to cause at least a portion of the transition metal complex to be unbound from the surface. For similar reasons, the rejections of independent claims 39 and 40 are not proper. Applicant respectfully request reconsideration of the rejections based upon Matyjaszewski..

Conclusion

Applicants have made a diligent effort to fully respond to all the concerns and comments of the Examiner. Therefore, Applicants respectfully request that a timely Notice of Allowance be issued in the subject application. If the Examiner has any concerns regarding Applicants' present response, he is invited to contact Applicants' undersigned representative at the telephone number listed below so that those concerns may be expeditiously addressed.

Respectfully submitted,



Bernard G. Pike
 Registration No. 46,993

Kirkpatrick & Lockhart LLP
 Henry W. Oliver Building
 535 Smithfield Street
 Pittsburgh, PA 15222-2312
 Telephone: (412) 355-8620
 Facsimile: (412) 355-6501